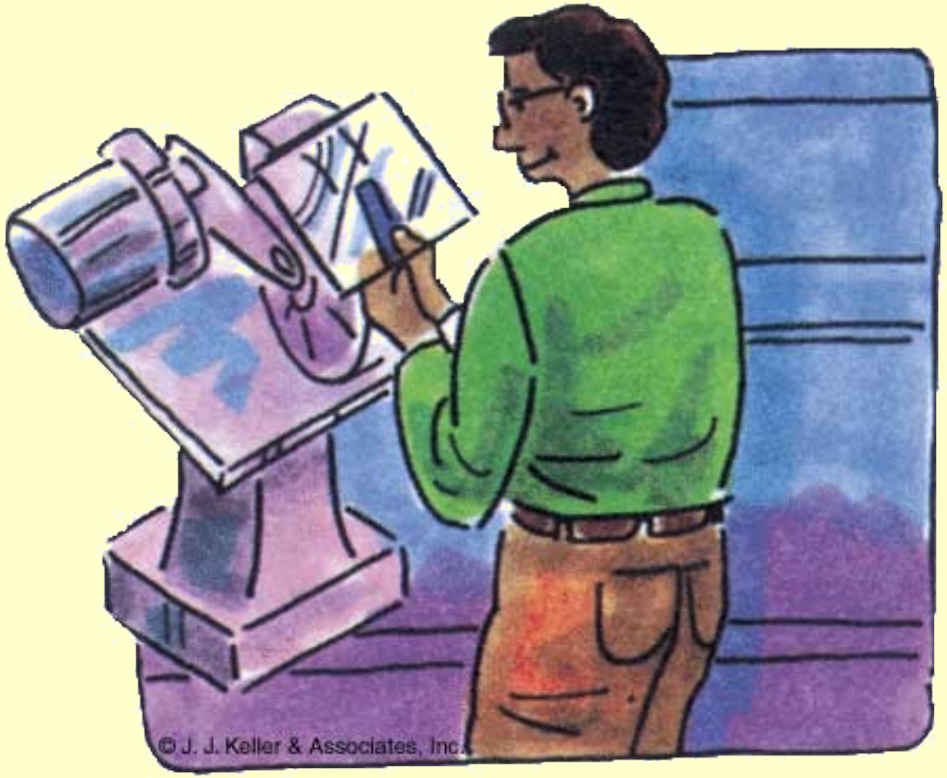
Machine Guarding

"As you can see, we now have guards on all our machines!"

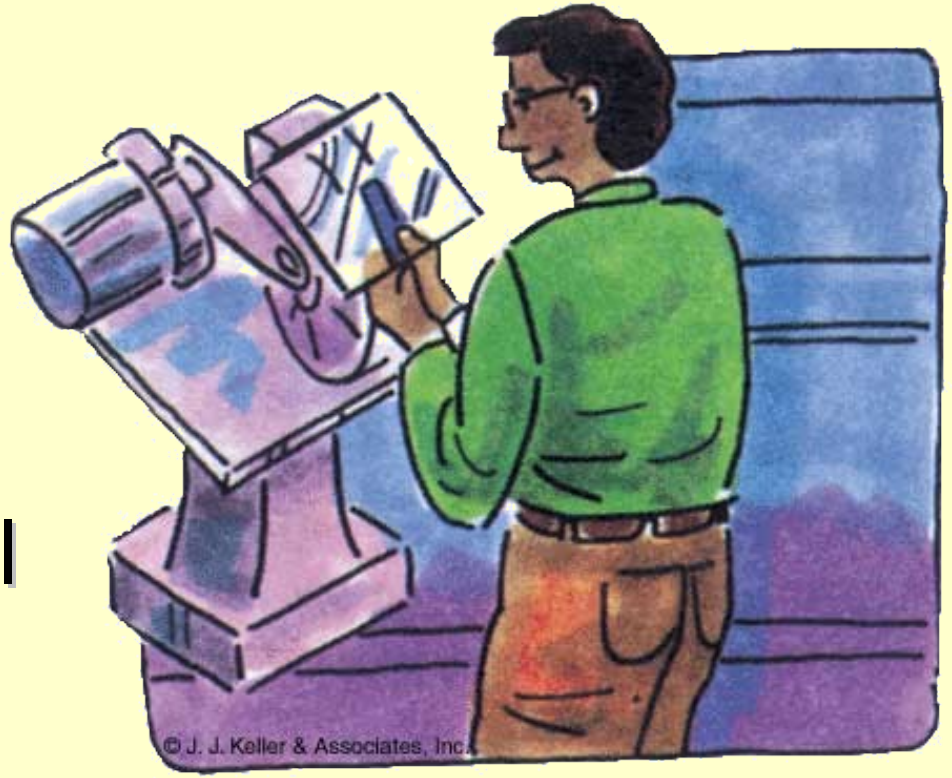
Operating procedures reduce risk of injury

- Pre-startup inspection
- Job set-up
- Control panel



Operating procedures reduce risk of injury

- Normal shutdown procedure
- Emergency shutdown procedure
- Maintenance during normal activities



Hazards of machine operation

- Rotations
- Reciprocating motions
- Transverse motions

Hazards of machine operation

- Severe injuries
  - Amputation
  - Fractures
  - Lacerations
  - Crushing injuries

Hazards of machine operation

- Minor injuries
  - Bruises
  - Abrasions
  - Sprains and strains
  - Pinching injuries
  - Minor burns
  - Cuts

Safeguards

- Fixed guards
- Interlocked guards
- Adjustable guards
- Self-adjusting guards

Safeguards

- Presence-sensing devices
- Pullback devices
- Restraint devices

Safeguards

- Safety trip controls
- Two-hand controls
- Gates

Safeguards

- Shields
- Holding or handling tools
- Machine location
- Awareness barriers

Adjustable guards

- Routers, band saws, table saws have adjustable guards
- Restraint straps
- Operator is responsible for adjusting

Adjustable guards

- Stop machine to adjust guard
- Fit guard to prevent tools, fingers from being pulled under or around it
- Adjust restraint so as to restrict reach into machine

Report damaged or missing guards

- Perform routine inspections
- Missing or damaged guards compromise safety

Report damaged or missing guards

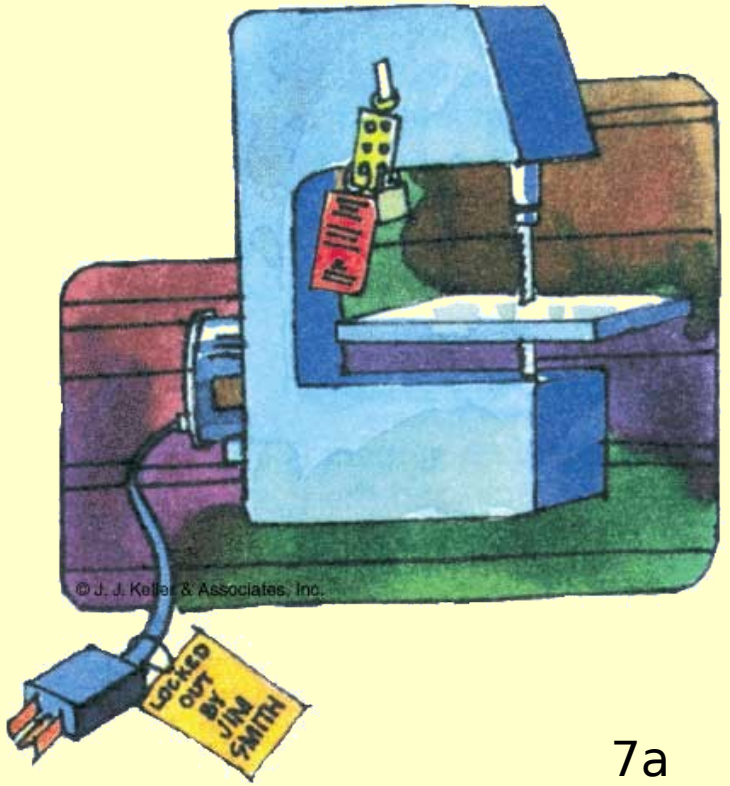
- Never run machine without adequate guards
- Report damaged or missing guards

Machine servicing

- Lubrication
- Minor adjustments
- Take protective measures if guards must be removed to perform maintenance

Lockout/Tagout

- De-energize machine if unexpected startup or release of energy could injure employee



Responding to injuries/ accidents

- Machine entrapment injuries can be severe

Responding to injuries/ accidents

- Help will be needed by company specialists:
  - Mechanics
  - Electricians
  - Operators
  - Specialized tools may be needed

Responding to injuries/ accidents

- Call 911 for Emergency Services
- Employee must report accident to Supervisor as soon as possible.
- Report accident using the Preliminary Incident Notification Report on RIA Safety Office Website within 2-hours of occurrence.
- Conduct Safety After Accident Review (SAAR) with 72-Hour of occurrence.

Responding to injuries/ accidents

- Emergency responders need to follow requirements of OSHA's Blood borne Pathogens standard.